Milkweed Monitoring

Name: Kevin Atterberg
Teaching content area(s):
7th Grade Science
School: Stilwell Junior High
Extern host site: Des Moines Parks and Recreation

<u>Part I: Overview of Business</u>
The Des Moines Parks and Recreations department was founded in 1892 with the mission of "Helping Des Moines live well, play hard and protect the earth."
The department is responsible for the management of 76 parks, over 4,000 acres of parkland, and 81 miles of paved and natural trails.

<u>Part II: Job Specifics</u>
Kevin worked as the milkweed plant data collector for the Parks and Recreations department. During his time he explored 77 different locations across the city of Des Moines. At each location he monitored the total number of stems and type of milkweed, as well as, the number of eggs, caterpillars, and monarch butterflies. Kevin used this information to help build a map and spreadsheet for each location, that shows areas where there is established milkweed plants and what locations would be best fit for future milkweed locations.

<u>Part III: Introduce the Problem</u>
Successful growth of the milkweed plant is a direct correlation with the survival rate of the monarch butterfly. How can we accurately gather and present data to help determine relationship between the monarch butterfly and the milkweed plant?

<u>Part IV: Background</u>
- Students should know how to gather and compile data.
- Students should be able to recognize the four different types of milkweed.
- Students should know the symbiotic relationship between the milkweed plant and the monarch.

<u>Part V: Business Solution</u>
- Des Moines Parks and Recreation located which parks already have existing milkweed and where in each park would be the best locations to provide more habitat for the monarch butterfly.

<u>Part VI: Student Solutions</u>
- Students will be able to locate and determine the different species of milkweed.
- Students will be able to collect data that they will use to create graphs/maps of locations to help determine population of the monarch butterfly.
- Students will be able to plan and determine the best locations for possible milkweed locations.